ABSTRACT OF THE DISCLOSURE

A color bar code system includes a camera reader to read at least one color bar code having a subset of N bar code colors, a color association unit and an identifier. The color association unit associates each point in a color space with one of the bar code colors. The color association unit is calibratable to the range of colors that the camera reader is expected to produce given at least one environmental condition in which it operates. The identifier uses the color association unit to identify an item associated with the bar code from the output of the camera reader.